AMENDMENTS TO THE CLAIMS

Claim 1 (Original): A semiconductor device comprising:

a first layer ~~composed of~~ comprising a group III nitride semiconductor,

a second layer ~~composed of~~ comprising a group III nitride semiconductor, and

a gate electrode,

wherein the first layer ~~has a region formed~~ is provided between the gate electrode and the second layer;

wherein a channel is formed in at least one of: (1) the first layer, (2) the second layer, (3) the region between the first layer and the second layer when electric voltage is applied to the gate electrode; ~~and~~

wherein the conductivity type of the second layer is inversed with respect to the conductivity type of majority carriers ~~flowing~~ that flow in the channel, and

wherein the first layer has a thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 2 (Currently Amended): The semiconductor device as described in claim 1, further comprising:

an electrode being in contact with the first layer and the second layer,

wherein the ~~second layer is in contact with an electrode for leading out carriers with the conductivity type inversed with respect to that of the carriers flowing in the channel from the device~~ electrode leads out carriers having the same conductivity type as the second layer from the channel via the second layer.

Claim 3 (Canceled)

Claim 4 (Currently Amended): A semiconductor device comprising:

a first layer ~~composed of~~ comprising a group III nitride semiconductor of a first conductivity type,

a second layer ~~composed of~~ comprising a group III nitride semiconductor of a second conductivity type,

a third layer ~~composed of~~ comprising a group III nitride semiconductor of the first conductivity type, and

a gate electrode,

wherein the first layer ~~has a region formed~~ is provided between the gate electrode and the ~~second~~ third layer;

wherein the third layer ~~has a region formed~~ is provided between the first layer and the second layer; ~~and~~

wherein the band gap of the third layer is less than the band gap of the first layer; and

wherein the first layer and the third layer have the thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 5 (Currently Amended): A semiconductor device comprising:

a first layer ~~composed of~~ comprising a group III nitride semiconductor of a first conductivity type,

a second layer ~~composed of~~ comprising a group III nitride semiconductor of a second conductivity type,

a third layer ~~composed of~~ comprising a group III nitride semiconductor, and

a gate electrode,

wherein the first layer ~~has a region formed~~ is provided between the gate electrode and the ~~second~~ third layer;

wherein the third layer ~~has a region formed~~ is provided between the first layer and the second layer; ~~and~~

wherein the band gap of the third layer is less than the band gap of the first layer and the second layer, and

wherein the first layer and the third layer have the thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 6 (Currently Amended): The semiconductor device as described in claim 5, wherein the third layer ~~is composed of~~ comprises a substantially true group III nitride semiconductor.

Claims 7-9 (Canceled)

Claim 10 (Currently Amended): ~~The~~ A field-effect transistor ~~as described in claim 8~~ comprising:

a gate electrode;

a first layer comprising a group III nitride semiconductor of a first conductivity type;

a second layer comprising a group III nitride semiconductor of a second conductivity type located on a side of the first layer opposite to the gate electrode,

a third layer located between the first layer and the second layer; and

an electrode being in contact with the first layer and the second layer,

wherein ~~a~~ the third layer ~~having~~ has a band gap smaller than the band gaps of the first layer and the second layer ~~is located between the first layer and second layer~~.

Claim 11 (Currently Amended): The field-effect transistor as described in claim 10, wherein the third layer ~~is composed of~~ comprises a true group III nitride semiconductor.

Claim 12 (Currently Amended): ~~The~~ A field-effect transistor ~~as described in claim 8~~ comprising:

a gate electrode;

a first layer comprising a group III nitride semiconductor of a first conductivity type;

a second layer comprising a group III nitride semiconductor of a second conductivity type located on a side of the first layer opposite to the gate electrode,

a third layer located between the first layer and the second layer; and

an electrode being in contact with the first layer and the second layer,

wherein ~~a~~ the third layer ~~composed of~~ comprises a group III nitride semiconductor of the first conductivity type and ~~having~~ has a band gap smaller than the band gap of the first layer ~~is located between the first layer and second layer~~.

Claim 13 (Currently Amended): ~~The~~ A field-effect transistor ~~as described in claim 8 that operates in a normally off condition, wherein a depleted layer expanding from the second layer to the first layer depletes the entire first layer when no electric voltage is applied to the gate electrode~~ comprising:

a gate electrode;

a first layer comprising a group III nitride semiconductor of a first conductivity type; and

a second layer comprising a group III nitride semiconductor of a second conductivity type located on a side of the first layer opposite to the gate electrode,

wherein the first layer has a thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 14 (Currently Amended): The field-effect transistor as described in claim 13, further comprising:

a gate insulating film disposed between the gate electrode and the first layer.

Claim 15 (Previously Presented): The semiconductor device of claim 1,

wherein the first layer has a first conductivity type,

wherein the second layer has a second conductivity type,

wherein the first layer and the second layer are in contact with each other,

wherein the first layer and the second layer have band gaps, and

wherein the band gap of the first layer is larger than the band gap of the second layer.

Claim 16 (Canceled)

Claim 17 (New): The semiconductor device as described in claim 1, further comprising:

a gate insulating film disposed between the gate electrode and the first layer.

Claim 18 (New): The semiconductor device as described in claim 1, wherein

a plurality of the second layers is formed to leave a gap between adjacent second layers, and

the channel is formed at the gap.

Claim 19 (New): The semiconductor device as described in claim 18, further comprising

a fourth semiconductor layer comprising a group III nitride semiconductor, a part of the fourth semiconductor layer being formed at the gap, and

a second electrode being in contact with the fourth layer at a side opposite to the gate electrode.

Claim 20 (New): The field-effect transistor as described in claim 10, wherein the first layer and the third layer have the thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 21 (New): The field-effect transistor as described in claim 20, further comprising:

a gate insulating film disposed between the gate electrode and the first layer.

Claim 22 (New): The field-effect transistor as described in claim 10, wherein

a plurality of the second layers is formed to leave a gap between adjacent second layers, and

a channel is formed at the gap.

Claim 23 (New): The field-effect transistor as described in claim 22, further comprising

a fourth semiconductor layer comprising a group III nitride semiconductor, a part of the fourth semiconductor layer being formed at the gap, and

a second electrode being in contact with the fourth layer at a side opposite to the gate electrode.

Claim 24 (New): The field-effect transistor as described in claim 12, wherein the first layer and the third layer have the thickness dimension so that a depleted layer developed from the second layer when no electric voltage is applied to the gate electrode expands up to a surface of the first layer at a side where the gate electrode is located.

Claim 25 (New): The field-effect transistor as described in claim 24, further comprising:

a gate insulating film disposed between the gate electrode and the first layer.

Claim 26 (New): The field-effect transistor as described in claim 12, wherein

a plurality of the second layers is formed to leave a gap between adjacent second layers, and

a channel is formed at the gap.

Claim 27 (New): The field-effect transistor as described in claim 26, further comprising

a fourth semiconductor layer comprising a group III nitride semiconductor, a part of the fourth semiconductor layer being formed at the gap, and

a second electrode being in contact with the fourth layer at a side opposite to the gate electrode.